REMARKS

Reconsideration and allowance are respectfully requested.

A new more descriptive title is provided. The abstract and specification are amended to correct grammar and idiom and in light of U.S. patent practice. Claims 1 and 31 are amended so as not to invoke 35 U.S.C. §112, sixth paragraph and new claims 49 and 50 are added which specifically do employ means language to invoke 35 U.S.C. §112, sixth paragraph.

Claim 1 is rejected under 35 U.S.C. §112, second paragraph for antecedent basis concerns. Those concerns are resolved by amendment to claim 1. Withdrawal of the rejection is requested.

The rejection of claims 46 and 47 under 35 U.S.C. §101 is moot because those claims are canceled.

Claims 1-48 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable based on Redi. This rejection is respectfully traversed.

Redi teaches performing energy-based routing in ad hoc wireless networks [0016]. Paragraph [0014] describes Redi's goal of energy-efficient routing in order to prolong battery life. The method includes: (i) determining path loss information across the at least one communications link by evaluating power data corresponding to a received signal from the first node; (ii) distributing the path loss information to the network; and (iii) routing messages to the network based on path loss information [0017]. The route quality information is used to determine the minimum power level needed for successfully transmitting information between nodes. See [0018]: "determining a network routing path including a lowest energy path and routing a message via the lowest energy path."

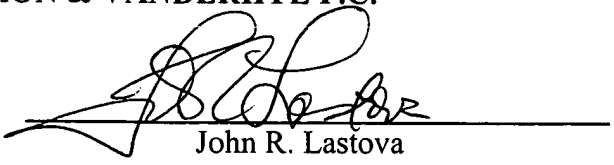
In contrast, the claims in this case relate to link quality rather than focusing on link energy. Example link quality parameters recited in dependent claims include Doppler spread, average fading duration, coherence time, variational speed, radio signal quality, bit error, etc., see, e.g., claim 7. Energy conservation and link quality look at network routing from different perspectives. By focusing on link quality, as opposed to using the most energy efficient link, a more reliable communication link is provided from source to target, thereby reducing the risk of lost packets, the need for packet retransmission, and the burden on the network capacity. A predictive algorithm operates on information relating to time varying properties of the link quality parameter(s) for determining an actual route path.

New dependent claim 51-56 recite that the link quality information is used in a route path determination process to select higher quality links for the determined route path irrespective of whether the selected higher quality links are the most energy efficient links. In contrast, Redi's energy-based routing necessarily choose links that result in the lowest energy path.

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
John R. Lastova
Reg. No. 33,149

JRL:maa
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100